

DFS QUARTERLY

A PUBLICATION OF THE DEPARTMENT OF FIRE SERVICES • STEPHEN D. COAN, STATE FIRE MARSHAL • VOL. 4 • ISSUE 3 • SEPTEMBER, 1999

Factory Mutual Global Awards \$3,000 Arson Grant to State Fire Marshal's Investigation Section

The Massachusetts Office of the State Fire Marshal, Fire and Explosion Investigation Section, received \$3,000 from Factory Mutual Global to purchase two accelerant detection canines. One canine will be to aid in arson investigations in the Worcester County area, and the other will replace a retiring canine.

The check was presented to State Fire Marshal Stephen D. Coan by Lawrence King of Factory Mutual on August 19 at the Department of Fire Services in Stow. Lt Fay, Section Commander of the Fire and Explosion Investigation Section, Trooper Paul Horgan, and Lucy were also on hand.

The accelerant detection canine is trained to explore fire scenes and detect substances arsonists use to set fires. One of the canines will be utilized to fill a gap in coverage for Worcester County and will be an

invaluable tool in prosecuting arson fires. The Connecticut State Police Canine Program will train the canines for the Office of the State Fire Marshal, Fire and Explosion Investigation Section.

Through its arson grant program, FM Global — the world's largest insurance company dedicated solely to property protection — assists organizations striving to prevent and control arson. This program awards grants annually to fire departments and related agencies for investigative tools, flammable detectors, training programs, juvenile firesetter programs and much more.

For more information on FM Global's commitment to fire service involvement, visit its website at www.fmglobal.com. ♦



From the Desk of the Fire Marshal

Stephen D. Coan

Feasibility Study for Phase III Approved

The Capital Supplemental Budget approved by the Legislature and signed by the Governor includes \$750,000 for a feasibility study for the Phase III build-out at the Stow campus of the Department of Fire Services. This initial funding will permit us to start with an architectural design study and resolve land transfer issues. The Phase III build-out will be a long process but it has finally begun.

New HazMat Director

David Ladd came on board June 29, 1999, as the new Director of the Hazardous Materials Response Division. David has been very busy attending Advisory Board, Steering Committee, and subcommittee meetings in order to get to know everyone and to come up to speed on the operation of the division. He brings with him an extensive knowledge of emergency medical and administrative management. He has participated in critical incident planning, from a variety of perspectives, and in preplanning for special events. Dave has already exhibited his motivational leadership and has provided many innovative ideas to keep the Hazardous Materials Response Division moving forward. He can be reached at 978-567-3117.

On behalf of the DFS, I would like

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Lawrence King, Stephen Coan, Lt. Martin Fay, Lucy and Tpr. P. Horgan

From the Fire Marshal

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to express our appreciation to Steve Clendenin and Paul Otenti who have served as acting and deputy directors for the Hazardous Materials Emergency Response Division since March of 1997. The support, guidance and leadership that they provided was a tremendous asset to the division. Under their direction, the Hazardous Materials Emergency Response Division continued to move forward, developing new and improved procedures, procuring equipment, thus increasing the efficiency and safety of all team members.

On a more personal note, the dedication, diligence, and professionalism they have always exhibited is exemplary in every way. I appreciate their work ethic and their tireless commitment to making this program the model for Hazardous Materials Emergency Response in this country. These personal qualities make them an invaluable asset to the Hazardous Materials Response Division as well as the Department of Fire Services. I am very happy they will continue their work with the Hazardous Materials Emergency Response Division as Technical Deputy Directors.

Sad Farewell to Todd Harrington

It is with deep regret that I announce the resignation of Todd Harrington as Director of the Office of the State Fire Marshal effective September 17, 1999. In his tenure here, Todd has gained the admiration and respect not only of the DFS family, but the Massachusetts fire service and the regulated community. His presence and steadying influence in the Office of the State Fire Marshal will be sorely missed.

Papa Gino's Sponsors FPW Open Houses Again

The Papa Gino's restaurant chain will again be sponsoring open houses at fire stations during fire prevention

month. Fire departments with a Papa Gino's restaurant within five miles are eligible to participate. Fire chiefs were recently sent detailed information on whom they should contact at Papa Gino's. I urge fire chiefs to take advantage of this opportunity to connect with members of the community, show them what we do, and to provide life safety education.

DFS Summer Camp Program

This was the third successful year of our summer camp program. We had three days here at Stow and on the fourth day, we took the program on the road to West Springfield onto the

grounds of the "Big E." I want to express my thanks to the dozens of firefighters, nurses, and health educators who donated their time to creating the happy smiles of 120 children. We knew we were doing something right when the harshest criticism the youngsters had on suggested improvements was "put cheese on the burgers." I am extremely proud of the members of the DFS staff that participated in this event and helped to make it such a success. Of course, there would be no summer camp if it weren't for the generosity of the corporate sponsors who provided film, t-shirts, food and other necessities. ♦

Fire Prevention Week

October 3-9, 1999

The goal of Fire Prevention Week is to bring important fire safety messages to the forefront of people's attention. Smoke alarms give precious time to escape, but too many people die because they don't know how to escape when they can't see, can't breathe, or can't use the usual exits. Fire Prevention Week takes place each year during the week of October 9, the anniversary of the Great Chicago Fire in 1871. This year Fire Prevention Week is October 3-9. Fire safety educators throughout the country are encouraged to work with school children to develop home escape plans and then to put those

plans into action during Fire Prevention Week in a national fire drill on October 6. ♦



HAZARDOUS MATERIALS RESPONSES

The Hazardous Materials Emergency Response Division of the Department of Fire Services has responded to 14 incidents since May 11, 1999. 12 were Tier 1 – Hazard

Risk Assessment and 2 were Tier 2, Entry and Mitigation. The break down by response district was: District 1 – 1, District 2 – 3, District 3 – 2, District 4 – 4, District 5 – 0, and District 6 – 4. The

following is a list of the locations and type of incidents the Hazardous Materials Response Division has responded to since the last newsletter:

DATE	LOCATION	DIST.	TYPE	TIER
05/16/99	Lawrence	6	Dye solution - Business	1
05/25/99	Chelsea	2	Acetic Acid - Business	1
05/27/99	Randolph	1	Methyl Methacrylate - Dentist Office	1
05/28/99	Belmont	2	Anti-Foaming Solution - Fire - Commercial Business	1
06/09/99	Holliston	3	Freon Leak - HVAC unit - Business	1
06/18/99	Andover	6	Ammonia - Skating Rink	1
06/26/99	Salisbury	6	Methyl Amyl Ketone - Business	1
06/27/99	Charlemont	4	Liquid Latex - Train Derailment	2
07/06/99	Hopkinton	3	Dichloromethane, Methyl Alcohol - Transportation Company	1
07/13/99	Revere	2	Gasoline – Tractor Trailer Accident	1
07/14/99	Chicopee	4	Nickel Chloride, Hydrochloric Acid	1
07/15/99	North Andover	6	Acetone - Transportation Company	1
07/25/99	West Springfield	4	Mace - Business	1
07/26/99	Longmeadow	4	Chlorine - Residence	1

Residential Sprinklers and Back Flow Devices

The Office of the State Fire Marshal, through Timothee Rodrique, Fire Protection Engineer, has been working with the Department of Environmental Protection (DEP) on the wording to be included in an upcoming change to 310 CMR 22, *Drinking Water Regulations*. Our goal in working with the DEP is to try and address issues that arise regarding the installation of residential sprinklers and back flow prevention devices. Our efforts are focused on back flow prevention devices in one and two family dwellings and manufactured

homes. Further, the preferred method of installation is to have the cross connection after the water meter; however, this is not part of the current regulation.

In order to help promote residential sprinklers and minimize issues regarding cross connections, we have assisted the DEP by providing the proposed language for the upcoming 310 CMR 22.00 change. The proposed language states: “nontestable devices shall be used.” The only requirement for this nontestable

device is that a fire department connection not be installed or requested on one- and two-family dwellings. This is in accordance with the *National Fire Protection Association (NFPA) Standard 13D, Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*. At this time, the Department of Fire Services is asking for support on the re-write of the current regulation. Public hearings should take place this October. If you have any questions please contact Tim Rodrique, Fire Protection Engineer at 978-567-3376.♦

September Deadline to Request Field Programs

By John McNamara, Field Programs Coordinator

The Massachusetts Firefighting Academy (MFA) sends out to every department chief, and training officer a spring and a fall course catalog listing academy *Field Programs*. The courses run from March to June and from September to December. Each training district or county is eligible for six requests a year; three in the spring and three in the fall. The district committee chairman is listed in the catalog.

Since field programs are scheduled well in advance, your selections for the spring semester should be submitted to the district training chairman in September.

Although some of the field programs are 6 hours in length, the majority are 12 hour programs. They can be held on weekends, nights (7-10) and weekdays (9-4) to suit the "host" department.

A list detailing the field programs that offer OEMS credit hours is on the back pages of the course catalog.

In order to host a program, it will be necessary to arrange for classroom in your community, such as a local school, library or fire station, that will accommodate up to 35 students. One or more of the following items may also be

required: a 35mm slide projector, an overhead projector, movie screen, VCR, flip chart stand, paper and markers. The academy will be able to supply provide the required projector if one is not available.

Each student must fill out a separate application form and return it to the academy via mail or fax to (978) 567-3229. Two weeks prior to the start of the course, there must be a minimum of 15 students registered for the program to be conducted.

If your course involves aerial or ground ladders, they must have a test certificate. If the course involves pumping apparatus and you have only one pump available for the practical session, a pumper can be sent out by the academy. If the course is Vehicle Extrication, usually 6 or 7 vehicles would be required for the practical session. On the vehicles used, the gas tanks, batteries, and any undeployed air bag units would have to be removed.

Following are the courses offered through the Field Program which are all 12 hours in length unless otherwise noted.

Aerial Ladders
Building Construction: Wood & Ordinary
Conducting Basic Fire Inspections
Electrical Safety for the Firefighter: 6 hours
Emergency Vehicle Operator: 6 hours
Firefighter Health & Safety
Firefighter Safety & Survival: The Company Officers Responsibility
Firefighting Foam for Class "B" Fires
Incident Command System
Incident Safety Officer
Infection Control for Emergency Response Personnel: The Supervisor's Role
Large Diameter Hose
Protective Breathing, Search & Rescue: (4500 psi Technology)
Pumps & Hydraulics
Rural Water Supply
Search for the Missing Person: 6 hours
Search & Rescue: 6 hours
Small Aircraft Procedures: Familiarization & Rescue
Tactics & Strategy for the Firefighter
Vehicle Extrication
Wildland Fires

If you have any questions on field programs call me at 978-567-3225 My e-mail address is:

John.McNamara@state.ma.us ♦

Industrial Fire and Safety Training

The industrial community plays a vital role in a safe workplace. The Massachusetts Firefighting Academy has long recognized the importance of industrial fire brigades. While no one would suggest they supplant the efforts of a municipal fire department, a well trained brigade can provide an important first line of defense. The Industrial Group of the Massachusetts Firefighting Academy officers a variety of open enrollment seminars as listed below. For further information or to register, please

contact Richard Erban at (978) 567-3206.

September 17, 1999
Incident Command for Industry

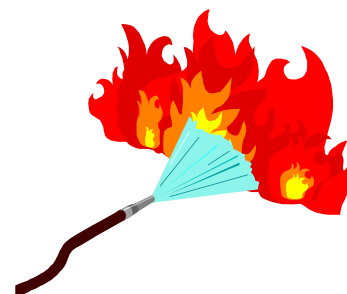
October 13, 1999
Hazardous Waste Operations and Emergency Response Refresher (HAZWOPER)

November 17, 1999
Industrial Terrorism

April 12, 2000
Hotel / Motel Fire Safety

May 17, 2000
Health Care Safety

June 14, 2000
Industrial Fire Safety ♦



5th Annual Fire & Safety Public Education Conference

**Sept. 30 - Oct. 1, 1999
Westford Regency**

This conference will be held September 30 to October 1 at the Westford Regency Hotel. Registration materials containing the workshop descriptions for the 5th annual Fire and Safety Public Education Conference will be distributed to all fire departments and other interested parties. To be included on this mailing list, e-mail Jennifer.Mieth@state.ma.us and be sure to put the word 'conference' in the subject line. The Massachusetts Public Fire and Safety Education Task Force, which serves as the planning committee each year, is pulling together numerous new and interesting workshops. The goal of this conference is to provide basic training for new fire educators through workshops that will interest our community partners, as well as new skill development workshops for experienced life safety educators.

Public Fire and Safety Educator of the Year Award

Do you know a firefighter, EMT, nurse, Lion's Club member, teacher, elder service worker or health educator that has made a significant contribution to life safety education in the community, the region, or the state? Nominate them for the Educator of the Year Award. Forms will be included in the conference registration materials. The Award will be given at the conference at lunch time on September 30.

Nomination forms and conference registration materials can be obtained from our website at www.magnet.state.ma.us/dfs/dfshome.htm ♦

Family Fire Safety Day

**Saturday, September 18
MDC's Houghton's Pond
Reservation, Milton**

The Metropolitan District Commission (MDC) and the Department of Fire Services will sponsor the 4th annual Family Fire Safety Day on Saturday, September 18, 1999 from 11 a.m. to 4 p.m. This special event will be held at Houghton's Pond in the MDC's Blue Hills Reservation in Milton.

Family Fire Safety Day is an event designed to promote fire awareness through safety activities, displays, children's games, helicopter and fire engine demonstrations and tours. Antique and new fire engines will be on display at the event. Smokey Bear and Sparky® the Fire Dog will be on hand. There is no admission charge and the food concession will be open. The weather is expected to be wonderful. Young and old alike will be treated to many exciting fire safety activities, demonstration and displays.

S.A.F.E. Educators, Fire Departments or organizations wishing to participate should contact Andy Reardon at the S.A.F.E. Program (978) 567-3385. Email: Andy.Reardon@state.ma.us ♦

FY '00 S.A.F.E. Grants

The FY '00 Student Awareness of Fire Education (S.A.F.E.) Grant applications have been sent to every fire chief in the Commonwealth in anticipation that the final budget will have a S.A.F.E. Program funded at either the House level (\$2.5 million) or the Senate level (\$1,078,666.) The deadline for submitting the grant applications is 5 p.m. Friday, September 10, 1999. The S.A.F.E. Grant Advisory Board will have from Sept. 17 to Oct 8 to review the grants and the goal is for the Administration to be able to announce the amount of the awards by October 29. The awards will not be made until the budget has been finalized. ♦

Public Fire Education Training

The Mass. Firefighting Academy is offering the following training classes in public fire education this fall. There will be additional offerings in the spring semester.

Recommended for lead S.A.F.E. Educators:

Public Fire and Life Safety Educator
40 hour course
November 1 – 5
Arlington Fire Department

Recommended for S.A.F.E. Instructors or those who don't have time for the full week class:

Public Education Presentation
12 hour course
December 13 – 14
DFS, Stow Campus

Public Education Presentation
12 hour course
September 25-26
DFS, Northampton Office

Recommended for managers of community education programs:

Methods of Enhancing Safety Education
New National Fire Academy - Direct Delivery
October 18-19
DFS, Stow Campus ♦

The **DFS Quarterly** is published every March, June, September, and December. If you have some newsworthy information to share with the fire service, you are welcome to submit articles to: Jennifer Mieth, Editor, DFS Quarterly, Dept. of Fire Services, P.O. Box 1025, Stow, MA 01775. (978) 567-3381 or Internet Address: Jennifer.Mieth@state.ma.us

The **DFS Quarterly** is published by the Massachusetts Department of Fire Services as a service to the fire service community.

Thank you to Judy O'Brien for keen-eyed proofreading and elegant rewording.

Haunted Houses

A joint memorandum from State Fire Marshal Stephen D. Coan and Thomas L. Rogers, Administrator, Board of Building Regulations and Standards, was sent to all heads of fire departments, building commissioners and inspectors of buildings on special amusement buildings for Hallowe'en and other special events.

This letter was issued as a reminder that Massachusetts has moved into the "carnival season" and that Hallowe'en will be upon us in short order. Both the Hallowe'en and carnival seasons generate common life safety issues, particularly where "haunted houses" or "fun houses" are operated and open to the public as ASSEMBLY USE buildings or portions thereof. If you would like a copy of this, please check out our website at www.magnet.state.ma.us/dfs/dfshome.htm or contact the Office of the State Fire Marshal at (978) 567-3300. In addition, the Board of Building Regulations and the Office of the State Fire Marshal are sponsoring three seminars on the current regulations and how they apply to these seasonal "haunted houses."

Sept. 8, 10 am -12 noon
DPS / CERC Building
Paul Dever State School
Taunton

Sept. 9, 7pm - 9 pm
DFS Western Mass. Office
One Prince St.
Northampton

Sept. 10, 10 am - 12 noon
DFS Main Campus
Stow

Such life safety issues become glaringly apparent when one reviews the history of the tragic May 11, 1984 fire in the "Haunted Castle" at the Six Flags Great Adventure Park in New Jersey. This incident resulted in the deaths of

eight visitors due to their inability to immediately exit the amusement structure. The life safety issues are also apparent when one considers the October 27, 1973 Washington Reid School PTA "haunted house" fire in which one half hour before a PTA-built "haunted house" maze was to be open for children's use, the maze caught fire killing one of the PTA volunteer members helping to construct it. ♦



USFA Offers Videos on Dormitory Fire Safety

The following two videos are available at no cost from the United States Fire Administration. They may also be borrowed from the Resource Library in the Public Education Unit.

Video: Get Out and Stay Alive

This 16 min. video addresses three main topics: Getting Out, Prevention, and Protection. Video footage from fires that took the lives of fellow college students establishes the base of this video. The lessons learned from these fires remind students how important it is to be responsible for their actions and why they must make it a point to know the necessary fire safety and prevention information that will lead to their survival in the event of a fire.

This video is presented with the purpose of making college students aware of the dangers associated with fire. An instructor guide and a pamphlet, which includes an outline of the video, accompany this video. The video also includes interviews with college students regarding fire safety that students could relate to.

This video would make a good fire safety program for senior high and college bound students.

Video: Ready to Respond / University of Maryland

This 12 min. video focuses on the application of fire protection systems from a college administrator's viewpoint. The video is intended to show evidence why a working fire alarm system, paired up with an adequate sprinkler system, is the best choice for a completely protected structure.

This video is presented to encourage school personnel responsible for student safety, to understand why smoke detectors and sprinkler systems are a wise investment for schools and colleges. The video compares college dorms to hotels, by using film footage to clearly show the need for adequate fire protection.

This video would make a good fire safety program for individuals responsible for the safety of students living on campus.

Contact:

Publications Center
United States Fire Administration
16825 South Seton Avenue
Emmitsburg, MD 21727
(301) 447-1660
Internet: www.usfa.fema.gov
Cost: Free

Polychlorinated Biphenyls(PCBs)

On August 2, 1999, State Fire Marshal Coan sent a memorandum to all fire chiefs about Polychlorinated Biphenyls (PCBs). The memorandum is excerpted below, but if you need a complete copy or have any questions, concerns, comments or suggestions, contact Jake Nunnemacher, Fire Protection Engineer, at (978) 567-3377.

In May, there was a transformer explosion and subsequent fire in a transformer vault at a facility's utility plant. The involved transformer, according to the electric company, was

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MFIRS CORNER

1999 MFIRS Data

As we enter the final quarter of 1999, we remind fire departments that data through August is due by mid September. Fire departments submitting data electronically should be reporting on a monthly basis. Fire data for calendar year 1999 will be due January 31, 2000. If you have any questions, please call Amy Marie Uzdevinis, Research Analyst/ MFIRS Manager at (978) 567-3382.

MFIRS Training Seminar

October 14, 1999
6:30 p.m. - 10:00 p.m.
Northampton Fire Dept.
26 Carlon Drive
MFA Course # 200039613 Session A

NFIRS Version V

As we get closer to our target date of conversion to the new version (Version V) of fire incident reporting, please remember that all updates will be in this column of the DFSQ. For now, any fire departments purchasing software for incident reporting should install Version 4.1 but make sure that your vendor will be ready and willing to give you all the support and upgrades to Version V on or about January 1, 2001.

Candle Fire Surveys

Due to the increasing number of candle fires in Massachusetts, the Fire Analysis and Research Division of the NFPA (National Fire Protection Association) and the Department of Fire Services have coordinated a *Joint Candle Fire Follow-Up Survey*. This special study of these fires will provide us with more detailed information on the situation during which the fire occurred, the use of the heat of ignition and the candles that caused the fires.

Candle fires are coded by using 44 (candle) as the form of heat of ignition

when filling out the Massachusetts Fire Incident Report (Form FP- 32). If we receive a fire incident report from your department coded this way, we will send you this form. The FDID#, incident #, date of the fire can be found at the bottom of the form. We ask that you fill out the form and return it in a timely manner to the Fire Data and Public Education Unit.

Your help with this project is greatly appreciated, and the data that we will be collecting will be of great use to the fire service as well as injury prevention and public health officials. The goal is to gain a greater understanding of these incidents, why they are happening and what we can do to prevent them. If you have any questions about this project please call me at (978) 567-3382.

1998 Candle Fire Statistics and Safety Tips

290 Fires Caused 3 Deaths and \$3.7 Million in Damages

In 1998, 290 fires were caused by candles. These fires caused three civilian deaths, 26 civilian injuries, 48 firefighter injuries and an estimated dollar loss of \$3.7 million dollars in damages.

Of the 290 candle fires, 90% were residential structure fires. Candles caused 260 residential structure fires, three civilian deaths, 26 civilian injuries, 47 firefighter injuries and an estimated dollar loss of \$3,203,017.

Candle Safety Tips

- Burn candles in the center of a 1-foot **circle of safety**, free of anything that can burn.
- Stay in the same room with burning candles; Do not leave unattended.
- Burn candles on a non-combustible surface such as a ceramic saucer, or plate.

- Be sure to snuff out candles before falling asleep, going out, or leaving the room.
- Teach everyone in the family the rules of safe candle use.
- Keep candles out of reach of small children and pets.

On November 10, 1998 at 3:08 a.m. the Lawrence Fire Department was called to a fire in a single family home started by a candle. An infant was trapped on the top floor and was rescued by a rookie firefighter on his first week on the job. No one else was injured and the estimated property damage was \$20,000. Smoke detector performance was undetermined.

Heating Equipment Fires

Unfortunately winter will be here before we know it. Here are some statistics and safety tips from the forthcoming *1998 MFIRS Annual Report* on heating equipment fires. Feel free to use these in your local media or public education efforts.

Coding Tip

When you or your fire investigators determine that heating equipment was involved in the fire, use Equipment Involved in Ignition Codes 10-19. If a fire was started by a woodstove, use code 13 and write the word *woodstove* in the equipment section if you don't know the make or model information. If a portable space heater is involved use code number 15 and write *electric space heater* or the make and model in the description line. For fires that start in the chimney, area of origin is code 57. This will allow us to better track these important fire problems.

1998 Heating Equipment Fire Statistics and Safety Tips

Massachusetts fire departments reported that some form of heating equipment was involved in 1,251, or

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12%, of the 10,613 structure fires in 1998. These heating equipment fires caused three fire deaths, 51 civilian injuries, 50 fire service injuries, and an estimated dollar loss of \$7.3 million. The average loss per fire was \$5,855.

Furnaces Should Be Cleaned and Checked Annually

Homeowners should have furnaces cleaned and checked annually to ensure that they are working well. Combustible materials such as trash or supplies should never be stored near heating equipment. Only licensed tradespeople may install oil, gas, or electric heating units. Regulations about oil burners may be found in 527 CMR 4.

Install Wood Stoves According to Building Code Standards

A homeowner must obtain a building permit prior to installing a wood or coal stove and the installation must be inspected upon completion. In general, the stove should be at least three feet away from walls, ceilings and furnishings. If the flue does not draw properly, deadly levels of carbon monoxide may accumulate in the home.

- Keep the temperature within the manufacturer's suggested range. Wood and coal stoves should be operated at moderate heat. If the fire is too low, creosote, a black tarry fire by-product, may accumulate in the chimney and eventually cause a fire. If the fire is too hot, nearby combustibles or creosote in the chimney could ignite.
- Only burn fuels intended for use in these stoves. Other items may cause overheating to release toxic fuels. Never use gasoline or flammable liquids to stoke the fire - doing so could cause an explosion.

- Place ashes in a metal container until they are completely cool. Hot ashes may stay "live" for 24 hours.

Have Chimneys Cleaned Annually to Remove Creosote

Creosote is a black, tarry by-product of fire. It can accumulate in your chimney and cause a fire. Have your chimney cleaned at the start of each heating season and check it monthly for soot build-up. It should also be checked for loose mortar. If you use a wood or coal stove, keep the temperature in the recommended range. Use chimney guards to prevent animals from nesting in your chimney. If you should have a chimney fire, have the chimney inspected by a professional before using it again.

Space Heaters

If you must use a space heater for heat, use it as safely as possible.

- When buying a heater, look for one that has been tested and labeled by a nationally recognized testing company.
- Keep the heater away from drapes, furniture or other flammable materials. Place it on a level surface away from areas where someone might bump it and knock it over.
- Do not leave heaters unattended.
- If you must use an extension cord, make sure it is a heavy duty cord marked with a power rating as least as high as that on the label of the heater itself. (These are usually orange colored.)
- Never leave a space heater unattended or running while you sleep. Keep electric heaters away from water. Never use them near a sink or in the bathroom.

Kerosene Heaters Illegal in Massachusetts

According to MGL Chapter 148, Section 5A, 25A and 25B, the sale and

use of all liquid-fired (kerosene) unvented space heaters is illegal in Massachusetts.

1998 Juvenile Firesetting Statistics and Safety Tips

In 1998, children playing with matches, lighters and other heat sources caused 632 reported fires, three civilian deaths, 39 civilian injuries, 39 fire service injuries and an estimated dollar loss of \$2.8 million. The average dollar loss per fire was \$4,494. These fires are down from 857 in 1997 and this decrease may be due to an increase in the number of Juvenile Firesetters' Intervention Programs across the Commonwealth.

Figures Underestimate the Problem

Because the fire department may consider a fire deliberately set by a juvenile or a group of children to be incendiary, these statistics should be considered an underestimate of the severity of the juvenile firesetting problem. For example, 55% of the 150 structure fires in non-residential schools were considered incendiary or suspicious. Because most of these fires occurred during the school day, it is likely that many were set by students. The ignition factor was unknown or not reported in 43% of the outside fires. Children were probably involved in many of these.

Coding Tip

When you or your fire investigators determine a fire was started by juvenile firesetting, please be sure to use Ignition factor 36 or 48, not 11 or 21. Ignition factor 36 is misuse of form of heat of ignition such as playing with matches, lighters, fireworks or candles. Ignition factor 48 is misuse of material ignited such as placing objects into an open flame. This will allow us to better track this important fire problem. ♦

CMR 2 Success!

For over a year a dedicated group of fire service personnel worked long and hard on the rewrite of the fireworks regulation to bring it up-to-date. Their efforts were realized when the new 527 CMR 2 became effective in February, 1999. It is fairly well known by now that one of the major changes in the regulation was related to the adoption of a national standard for distances between spectators and the launch site. The standards adopted in the new regulation have their origins in the NFPA standards and are universally recognized as the best reference for fireworks safety.

While this change created a great deal of concern as to whether or not some communities could continue to have shows at the same sites as in previous years, in reality few communities were negatively affected.

Once the revised regulation was adopted by the Board of Fire Prevention Regulations, the next key step in the process was to educate the fire service community about the new changes. A series of seminars were conducted across the state by staff in the Code Compliance and Enforcement Unit of the Office of the State Fire Marshal. These seminars were well attended and an important part of introducing the new regulation to

those who are closest to the issues of compliance. Following the introduction of the new regulation the compliance officers then provided support and assistance to those departments who had concerns about specific display sites.

The code compliance officers provided close to one hundred pre-site inspections across the state at the request of the various local fire departments. These inspections involved site reviews from a feasibility standpoint and focused on the available distances and natural barriers. While there were few communities that were not able to conduct shows this year, most communities either had adequate sites, modified their show plans, or found alternative sites that provided the necessary distances for a safe show. This may have been one of the most important steps taken in the introduction of the new regulation as it furthered the education process and took place well in advance of planned shows. In a number of cases the fireworks contractors were involved in this review process as well.

The final step in the preparation for the July 4th shows were pre-show inspections. Code compliance and enforcement officers conducted a number of show inspections over the

July 4th weekend. Inspections took place during afternoon daylight hours and focused on show set-ups and fencing requirements. While there were several problems encountered, corrections were made prior to the show and based on satisfactory completion of those corrections the shows were allowed to proceed.

Of significant interest in this whole process that started with the Fireworks Task Force two years ago, is that July, 1999 can be noted as one of the safer fireworks seasons. The Task Force has to be commended for the fine work they did. The Board of Fire Prevention Regulations has to be commended for recognizing the importance of adopting a national standard. The code compliance officers working in conjunction with the local fire departments have to be complimented for the fine educational process they conducted and support provided to the fire departments. The entire process resulted in substantially improved public safety for spectators as well as for the communities hosting the shows. It is most important that all gains made from this holiday season continue into the upcoming year where Millennium celebrations will likely involve numerous fireworks displays.♦

PCBs *Continued from page 7*

not supposed to contain any PCBs. During the clean up, samples were taken and tested. The samples tested positive for PCBs. Apparently, at one time, there was a PCB transformer in the vault, which somehow leaked or spilled a PCB liquid on the concrete floor. Evidently during the extinguishment of the fire, water released PCBs from the PCB impregnated concrete floor.

Polychlorinated biphenyls (or PCBs) are a generally non-flammable, water

insoluble, stable, non-volatile and inorganic viscous fluid. Askarel is a generic name for a PCB fluid used as a synthetic electrical insulating material. An askarel is a generic name because the concentrations of PCB's, chlorinated benzenes and contaminants can vary.

PCB's/Askarels were mainly used in voltage regulators, light ballasts, transformers and capacitors as heat transfer (coolants), hydraulic, or dielectric fluids (insulator). The most common exposure for firefighters to

PCB's is probably due to a problem with a PCB filled transformer.

Therefore, whenever dealing with a transformer related situation, firefighters must take adequate precautions. The only way to confirm that the transformer is PCB free is to have the liquid tested for PCB content. If the transformer is truly PCB free, there is still a possibility that the area surrounding the transformer is contaminated from a previous PCB transformer leak or spill. ♦

NEWS FROM CPSC

The following are excerpts from press releases issued by the U.S. Consumer Product Safety Commission (CPSC) regarding products recalled for fire or burn hazards. Consumers should immediately stop using any of these products and contact the U.S. Consumer Product Safety Commission or the manufacturer for instructions on how to proceed.

CPSC, Hasbro Announce Recall to Repair Star Wars™ Lightsaber™ Toys

June 24, 1999 Release # 99-129

WASHINGTON, D.C. - In cooperation with the U.S. Consumer Product Safety Commission (CPSC), Hasbro Inc., of Pawtucket, R.I., is voluntarily

recalling about 618,000 Star Wars Lightsaber toys for repair. There are two models of Lightsaber toys involved in this recall. The Darth Maul™ Double-Bladed Lightsaber has retractable red plastic "light blades" on both sides of a metallic-gray hand grip. When the blades are fully extended, the toy is 5 feet long. The Qui-Gon Jinn™ Lightsaber has a single retractable "light blade" made of green plastic that extends from a metallic-gray hand grip to about 3 feet. Both Lightsaber toys operate with two "C" batteries. The plastic blades on double-bladed Lightsaber light up when struck against another object, and the single-bladed Lightsaber stays continually lit when turned on. Both feature energy "humming," "charge-up" and motion-activated battle crash sounds. Mass merchandise and toys stores nationwide sold these Lightsabers from May 1999 through June 1999 for \$20 to \$30.



PROBLEM: The spring in the battery compartments of these toys can dislodge, causing the batteries to overheat or rupture. This can cause burns to consumers.

INCIDENTS/ INJURIES: Hasbro has received 38 reports of Lightsaber batteries overheating, including six reports of batteries rupturing. There are three reports of minor burns to consumers, and one consumer reported experiencing eye irritation.

WHAT TO DO: Consumers should stop using these Lightsabers immediately, and call Hasbro to get a free repair kit. The repair kit

contains instructions on how to install a battery protector. To get this repair kit or for more information, consumers should call Hasbro at (888) 690-6141 anytime, or go to their website at www.hasbro.com. Consumers also can write to: Hasbro Lightsaber Repair Program, P.O. Box 200, Pawtucket, RI 02862.

Lightsabers currently being sold with the sticker, "Now with battery protector" are not part of this recall.

Recall of Angel Candle Holders

June 23, 1999 Release # 99-126

CPSC and Atico International USA Inc., of Fort Lauderdale, Fla. are recalling about 18,000 angel candle holders. This angel candle holder is about 6 inches high and made of brass-plated mesh. Its head is a plastic, multifaceted "crystal." It has a tealight



candle holder on its back. The packaging of the candle holder includes the writing, "Mesh Candle Holder" and "World Showcase." There is no writing on the candle holder. Eckerd Drug Stores nationwide sold the candle holders between August 1998 and January 1999 for about

\$4.

PROBLEM: The angel's head on these candle holders can come into contact with the flame of a candle placed in the holder, posing a fire hazard.

INCIDENTS/ INJURIES: Atico has received one report of these candle holders melting, resulting in minor property damage. No injuries have been reported.

WHAT TO DO: Consumers should stop using these candle holders immediately and return them to any Eckerd store for a refund. For more information, consumers can call Atico at (800) 645-3867 anytime.

Recall of Work Lights

June 10, 1999 Release # 99-122

CPSC and Harbor Freight Tools, headquartered in Camarillo, Calif., are recalling more than 48,500 work lights, sold as magnetic base lights. The 75-watt light, measuring about 12 inches long, is made of black plastic with a metal bulb reflector. A magnet is connected to a flexible arm. Labeling on the magnetic end of the flexible arm reads in part, "WARNING! LAMP IS HOT...MADE IN CHINA." The light was sold in a white box that contained a Harbor

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NEWS FROM CPSC

Continued from page 10

Freight Tools Warranty Notice. The box was labeled in part, "SKU# P 32263 MAGNETIC BASE LIGHT-75 WATT MADE IN CHINA." Harbor Freight Tools stores and catalogs nationwide sold the lights from November 1994 through March 1999 for about \$10.

PROBLEM: These lights present electric shock and fire hazards.

INCIDENTS/INJURIES: CPSC and Harbor Freight Tools are not aware of any injuries related to these lights. This recall is being conducted to prevent the possibility of injuries.



Recall of Power Strips, Extension Cords

June 7, 1999 Release # 99-120

PRODUCT: Memo Six-Outlet Power Strip - Eskay Imports, of Chicago, IL., is recalling about 900 units of the Memo six-outlet power strip. The power strip is packaged in a white box with a blue stripe. While the power strip bears no labeling, the box is labeled in part, "Memo 6- OUTLET POWER STRIP," and "Designed in Taiwan." The power cord is labeled, "TR PLASTIC." Independent retail stores in the Chicago area sold these power strips from July 1997 through September 1998 for about \$3.

PROBLEM: The quality of the internal components is inadequate, and the cord could separate from the power strip. Use of this power strip could result in a fire or shock incident.

INCIDENTS/INJURIES: None reported.

WHAT TO DO: Consumers should immediately stop using this power strip and return it to the store where purchased for a refund. For more information, consumers should call Eskay Imports, collect, at (773) 558-9592 between 9 a.m. and 5 p.m. CDT Monday through Friday.

PRODUCT: Extension Cords - Raport Inc., of Levittown, Puerto Rico, is recalling about 4,800 extension cords sold only in Puerto Rico. These 12-foot extension cords have one plug and nine outlets — in three groups of three brown plastic outlets. The cords also have a white on-off switch and green wire. The cords are packaged in cardboard sleeves with writing that states, in part, "12 Foot Tree Light Cord," "Put 9 Outlets in Your Tree" and "MADE IN CHINA." The sleeves also show the cords being used on a pine tree. Yazmia 1-2-3 Stores in Puerto Rico sold the cords from August 1998 through March 1999 for about \$3.

PROBLEM: The wires on these cords are undersized and can be overloaded. They pose a fire and shock hazard.

INCIDENTS/INJURIES: None reported.

LP-Gas Grills Recalled

July 1, 1999 Release # 99-135

In November 1998, CPSC and Sunbeam Products Inc. recalled for repair about 80,000 Grillmaster gas grills with side burners. The side burner's propane gas hose on these grills can twist up toward the aluminum casting of the grill, causing overheating and melting of the hose. Gas leakage or a fire could result from the hose damage. To get a free repair kit or for more information, call Sunbeam toll-free at (888) 892-8150 anytime.

In May 1999, CPSC and Kmart announced a recall of about 40,000 Tru-Burn Portable LP Gas Grills because their burner manifolds can separate during use and ignite nearby combustibles. For more information, call Kmart toll-free at (800) 63KMART anytime.

Recall of Home Heating & Air Conditioning Components

August 18, 1999 Release # 99-158

CPSC and the Trane Company, of Tyler, Texas, a division of American Standard Inc., are recalling 9,900 accessory electric heaters. These heaters are used to provide supplemental heat in heat pump or electric heating systems. These auxiliary electric heaters were sold as a component in various models of Trane and American Standard brand air handlers for heating and air conditioning systems. The air handler is the indoor component of the consumer's air conditioning or heating system. The air handler is a painted metal cabinet, which has the Trane or American Standard nameplate on its front. The nameplate provides a list of accessory electric heater model numbers that could be installed in that air handler. The model numbers for the recalled units are BAYHTR1419A and B.

The model numbers for air handlers that may contain the recalled heater units are:

Subject Model Numbers

TWG048A140A; TWG060A150A; TWV036B140A; TVF036A140A; TWE030C140A,B; TWE030C140F; TWE030C14FB; TWE036C140A,B; TWE036C140F; TWE036C14FB; TWE042C140B,C; TWE042C14FB,C; TWE048C140A,B; TWE048C140F; TWE048C14FC; TWE060C15FC,D; TWE060D150A,B; TWE030P130A,B; TWE030P13FA,B; TWE036P130A,B;

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TWE030P13FA,B; TWE042P130A,B; TWE042P13FA,B; TWE048P130A,B; TWE048P13FA,B; TWE060P130A,B; TWE060P13FA,B; TWE063P130A,B; TWE063P13FA,B; TWE031E13FA,B; TWE037E13FA,B; TWE040E13FA,B; TWE065E13FA,B. All models have a single arabic digit after this final letter.

Independent installers of Trane and American Standard equipment sold these accessory heaters nationwide from October 1997 through May 1999 for between \$250 and \$400.

PROBLEM: Whether in the cooling, fan, heating or off mode, incorrectly routed wires can cause the accessory heater to continually cycle on and off. Excessive heat could catch nearby combustibles on fire.

INCIDENTS/ INJURIES: Trane and American Standard are aware of four reports of heaters continually running. No property damage or injuries were reported.

WHAT TO DO: Consumers should remove any combustible material from around the air handlers with recalled heaters. Consumers with one of these electric heaters should call their local independent Trane or American Standard dealer, listed in your local yellow pages, for a free inspection and repair, if needed. For assistance in locating a local independent dealer, contact Trane at (888) 556-0125 between 7 a.m. and 5:30 p.m. CDT Monday through Friday. Consumers also can get information on finding a local dealer online at <http://www.trane.com/residential/personaltouch/recall.asp>.

Recalls of Non-Child Resistant Lighters

June 15, 1999 Release # 99-123

PRODUCT: Lighters - ZNY Enterprises Inc., of New York, N.Y., is

recalling about 10,600 novelty and disposable cigarette lighters. The novelty lighters are shaped as a telephone pager, cell phone, and Godzilla. The disposable lighters are a "formal" design, which is a platinum-colored, gold-accented metal lighter. The lighters are refillable and each lighter has a sticker that reads, "MADE IN CHINA." Small retail and souvenir stores nationwide sold these lighters from January through April 1999 for about \$2 to \$6.

PROBLEM: The lighters do not have any child-resistant mechanisms, as required by federal law. Young children could ignite the lighters, presenting fire and burn hazards.

INCIDENTS/INJURIES: None reported.

WHAT TO DO: Consumers should stop using these lighters immediately and return them to the store where purchased for a refund. For more information, call ZNY Enterprises Inc. collect at (917) 373-4289 between 9 a.m. and 5 p.m. EDT Monday through Friday. Consumers outside the New York City area should call collect.

June 3, 1999 Release # 99-119

PRODUCT: Cigarette Lighters - C & H Trading, of Metairie, La., is voluntarily recalling about 40,000 disposable and novelty cigarette lighters. The recalled disposable lighters are metal with a rubber coating, which is red, blue, silver, chrome or black in color. The recalled novelty lighters are shaped as cars, grenades, elephants, alligators, motorcycles, guns or telephones. The cars are metal and plastic and are red or green in color. The telephones are plastic and are black in color. The other

novelty lighters are bronze-colored metal. The lighters were made in China. There is no labeling on the lighters. Small retail stores in Louisiana, **Massachusetts**, Minnesota, Nevada, Texas and Washington sold the lighters from October 1998 through March 1999 for about \$1 to \$3. A November 1998 C & H tradeshow in Louisiana also sold the lighters.

PROBLEM: The lighters do not have any child-resistant mechanisms, as required by federal law. Young children could ignite the lighters, presenting fire and burn hazards.

INCIDENTS/INJURIES: None reported.

Recall of Utility Lighters

July 26, 1999 Release # 99-147

CPSC and EKCO Housewares Inc., of Franklin Park, Ill., are recalling about 333,000 utility lighters. The recalled utility lighters are refillable and contain butane. They are about 9 inches long and have a white plastic base, red plastic handle with a black plastic trigger and on/off switch, and a metal barrel. "GAS TORCH" is imprinted on the barrel. A yellow label is affixed to the handle and reads in part, "DANGER: EXTREMELY FLAMMABLE CONTENTS UN-

DER PRESSURE...MADE IN CHINA." The lighters were packaged in cardboard display sleeves under the brand name EKCO. The package lists either item number 58046 or 15387. Mass merchandise, hardware and grocery stores sold the lighters nation-



Continued on next page

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wide from January 1997 through June 1999 for about \$3.

PROBLEM: These lighters can ignite in the trigger area when the trigger is pulled, creating a risk of fire and burn hazards to consumers.

INCIDENTS/ INJURIES: EKCO Housewares, Inc. received four reports of these lighters flaring up during use, causing minor burns to consumers' hands and arms.

Indictments for Sale of Non-child Resistant Cigarette Lighters

July 14, 1999 Release # 99-141

CPSC announced that two people have been indicted on charges arising from its investigation into the removal of child safety mechanisms from disposable cigarette lighters. A federal grand jury in Tennessee charged Donald M. Anthony of Memphis with seven felony counts, including obstruction of justice and making false statements to CPSC. His former assistant, Marie A. Marrese, also of Memphis, faces four similar charges and three additional counts of making false statements to a grand jury. Anthony and Marrese operated National Marketing, a now-defunct Memphis business that distributed cigarette lighters and other merchandise to convenience stores and other distributors nationwide.

The indictments are part of an ongoing investigation by CPSC and the U.S. Justice Department into the illegal sale of cigarette lighters with their child-resistant features disabled. The indictments allege that Anthony and Marrese conspired to profit from the sale of lighters with disabled safety mechanisms and to conceal the sales from government

investigators. The investigation is continuing against individuals and companies that bought lighters from National Marketing.

Before cigarette lighters were required to be child-resistant, during the period 1988-1990, an average of 150 persons were killed and nearly 1,100 injured per year as a result of residential fires started by children younger than 5 who were playing with lighters. Average annual property damage from such fires totaled almost \$70 million.

"CPSC's safety standard for cigarette lighters will prevent hundreds of fires and needless deaths each year, especially many deaths to children," said CPSC Chairman Ann Brown. "These indictments show that we will vigorously pursue criminal penalties against companies that provide false information and undermine CPSC investigations."

Each of six charges against Anthony, and each of the seven charges against Marrese, carries a maximum penalty of five years imprisonment and a \$250,000 fine. One of the obstruction charges against Anthony carries a maximum penalty of 10 years imprisonment and a \$250,000 fine.

In May, CPSC announced an injunction against a California retail chain, Premium Tobacco Stores, for selling lighters with disabled child-resistant mechanisms. CPSC is seeking civil penalties from the retailer and three of its corporate officers.

Indictments in Fireworks Investigation

July 1, 1999 Release # 99-134

The U.S. Consumer Product Safety Commission (CPSC) in cooperation with the U.S. Attorney for the Eastern District of Wisconsin today announced that three people have been indicted, and two others have agreed to plead guilty to federal charges resulting from

a multistate illegal fireworks investigation. These are the first indictments and plea agreements in an on-going investigation that has been expanded to other states including Illinois, Indiana, Kansas, Missouri and Washington.

The probe, conducted with the assistance of the Bureau of Alcohol, Tobacco and Firearms (ATF), began last year after a teenager was killed and two others were seriously injured in separate incidents in Wisconsin involving illegal fireworks. On July 14, 1998, a 17-year old boy in Shawano County, Wis., was killed by flying shrapnel after detonating an extremely powerful fireworks device commonly known as a "quarter stick" in a mailbox. On July 5, 1998, a 37-year old man in the same area lost several fingers and suffered a ruptured eardrum after another quarter stick exploded in his hand. On July 4, 1998, a 26-year old man suffered injuries, including the loss of a finger and a ruptured eardrum, when a similar device known as a "half stick" exploded in his hand.

Because of the extreme danger posed by these powerful fireworks devices, they and similar fireworks devices are banned under federal law.

A federal grand jury in Milwaukee, Wis., indicted 61-year old Donald R. Peters, his 34-year old daughter, Peggy Malueg, and 48-year old Charles J. Childers, on charges related to the sale and transportation of illegal fireworks devices. The two people who have agreed to plead guilty to similar charges are cooperating with government investigators. It is not known if the fireworks involved in the death or the injuries are connected to the people indicted today.

In addition, CPSC is working with officials of Native American reservations near Seattle, Wash., to stop the illegal sale of banned fireworks in that area. Tribal leaders are cooperating

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Administrative Order on Sprinkler Recall

On August 10, 1999, State Fire Marshal Stephen Coan issued an administrative order to all heads of fire departments regarding the recall of certain "Star" brand sprinklers. The Marshal asked fire chiefs to identify all locations in which the affected brand of sprinklers have been installed, to notify property owners of the recall, direct the removal and replacement of the recalled sprinkler heads, and to seek the cooperation of the local building official in this determination and notification process. The text of the U.S. Consumer Product Safety Commission's recall follows.

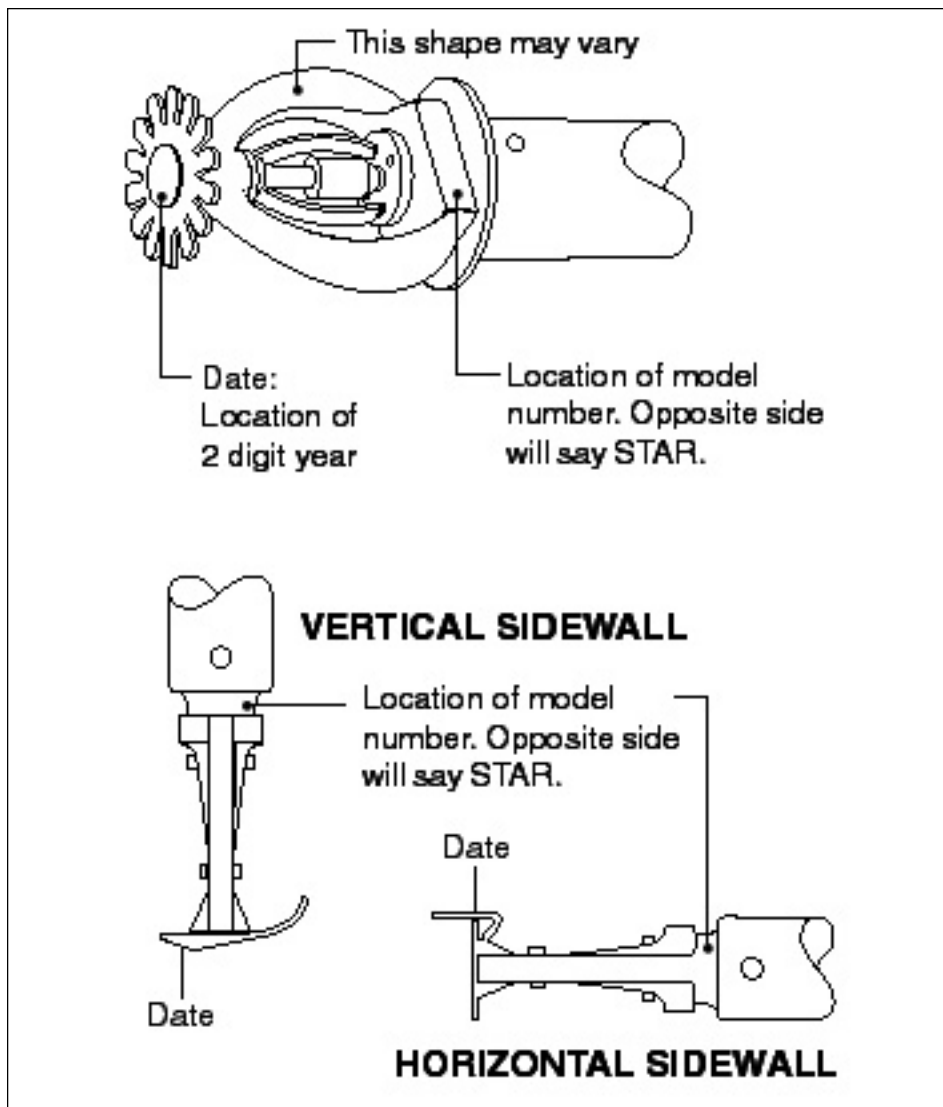
CPSC, Mealane Corp. Announce Recall of Star Fire Sprinklers

August 4, 1999 Release # 99-152

CPSC and Mealane Corp. of Philadelphia, Pa., are recalling up to 1 million "Star" brand fire sprinklers manufactured from 1961 through 1976. These sprinklers have been installed nationwide, primarily in nursing homes. They also may be found in hospitals, schools, resorts, stores, office buildings, warehouses and supermarkets. The Star sprinklers being recalled are dry-type models D-1, RD-1, RE-1, E-1 and ME-1 made from 1961 through 1976. The name "Star" appears on the sprinkler, along with the model number and date of manufacture. With "dry-type" sprinklers, portions of the pipe do not have water in them until the sprinkler activates. The former Star Sprinkler Co., of Philadelphia, Pa., sold its assets and changed its name in June 1976 and became known as Mealane Corp.

PROBLEM: These sprinklers could fail in a fire, exposing the public to bodily injury or death.

WHAT TO DO: Consumers and property owners should determine whether their facilities contain these



recalled sprinklers and if so, call the Star Sprinkler Recall Hotline at (800) 866-7807 or access the website at www.star-recall.com to participate in the recall. Mealane will provide free replacement sprinkler heads and reimbursement for the labor costs of removing and replacing the old units.

CPSC is continuing its ongoing investigation of fire sprinklers. ♦

Proposed 527 CMR Change Lightweight Truss Construction

June 29, 1999

As you are aware, the use of lightweight truss construction is increasing throughout the construction

industry. This allows for the costs of the construction to be reduced by reducing installation time, labor, and construction costs. By increasing the use of these lightweight trusses in both residential and commercial applications, the safety of the firefighters is of concern. Many firefighter deaths have been attributed to this type of construction.

Through the Board of Fire Prevention Regulations, our office is looking to implement a standardized approach to marking all commercial and industrial buildings along with residential homes over 5,000 sq. ft. We feel that this simple sign will help to promote the safety of the fire fighter. If you have any questions regarding this please feel free to contact Jake Nunnemacher, Fire Protection Engineer at (978) 567-3377. ♦

with CPSC and local law enforcement officials.

The ongoing investigation by CPSC, ATF, the U.S. Department of Justice's Office of Consumer Litigation, and various U.S. Attorney's offices also resulted in the seizure of more than 8,000 pounds of illegal fireworks in Keshena and Appleton, Wis., and Mason City, Ill. This includes more than 65,000 quarter-sticks, half-sticks, M-80s and similar devices banned as illegal hazardous substances under the Federal Hazardous Substances Act.

The initial investigation into the Wisconsin incidents resulted in the seizure of approximately 10,000 quarter sticks, M-80s, and other illegal fireworks from a fireworks establishment in Keshena, Wis., last August. Investigators subsequently learned of distributors in other parts of the country.

Under the Federal Hazardous Substances Act, CPSC prohibits the sale of the most dangerous types of fireworks to consumers. The banned fireworks include large, reloadable tube devices, cherry bombs, aerial bombs, M-80s, quarter-sticks, half-sticks, and other large firecrackers. Any firecracker with more than 50 milligrams of explosive powder is banned under federal law, as are mail order kits designed to build these fireworks.

Improper use of fireworks or the use of illegal fireworks can result in deaths, blindings, amputations and severe burns. In 1998, hospital emergency rooms treated an estimated 8,500 fireworks-related injuries.

CPSC conducts fireworks surveillance and enforcement throughout the year. Each year, CPSC stops hundreds of shipments of hazardous fireworks before they reach the store shelves. Working with U.S. Customs Service since 1988, CPSC has seized or detained more than 400 million hazardous fireworks at the docks. ♦

Unit Calling Repeat

By Mark Cady, DFS Communications Coordinator

Fireground communications is a vital link to effective tactics and overall safety of personnel operating at the scene. Structural firefighting practices utilizes fireground communications to coordinate evolutions and to track the accountability of students and Mass. Firefighting Academy (MFA) staff. Firefighters need to understand the communications system and equipment with which they operate. Firefighters must understand that all radio equipment has limitations and know how to work around these limitations.

Portable radios are designed for optimum performance when being held next to the operator's head so that the antenna is free and clear for proper signal propagation. Fire service personnel hamper this performance by placing remote speaker microphones on portable radios. Speaker microphones are necessary for firefighters to hear radios and communicate while using personal protective equipment (PPE). When the radio is placed into a holster or radio pocket, the antenna is concealed by the body and the signal propagation is affected, thus reducing the range of the equipment.

Building construction is also a contributing factor to the performance of radio equipment. Buildings with thick concrete walls, steel enclosures or substructures can degrade radio transmission signals. Fire departments need to pre-plan their communities and understand the limitations that these structures place on their system.

Maintenance of radio equipment is another contributing factor to performance. Firefighters must take a proactive approach to make sure that radio equipment is taken care of. If a radio gets wet, notify the proper personnel to have the radio looked at. Wet radios that are not taken care of

immediately will have problems in the near future. These problems could make it cost prohibitive to repair a radio. Cleaning the radio when it gets dirty by wiping it down with a clean, soft cloth will help to reduce further damage.

Batteries are another factor contributing to many radio failures. Ni-Cad batteries are the industry standard for fire service radios. Ni-Cad batteries have a problem of establishing a memory which can really hinder fireground performance. Batteries are used for short periods of time during fire responses and then turned off or returned to the charger. Batteries need to be used fully to meet maximum potential, otherwise, the battery will weaken and not perform properly when needed on the fireground.

Firefighters need to train with all equipment that they will use on the fireground. They should not learn of the restrictions of PPE and communications equipment in a hostile fire environment. Firefighters need to be trained on how to use portables with an SCBA and under physical stress. Firefighters on the other end of the drill understand why it is important that yelling into a portable makes it very difficult to understand. Firefighters need to practice giving orders and not only having them received but also understood. Training is where firefighters become proficient in the skills that they need to accomplish at emergency incidents.

In conclusion, we have looked into some of the radio pitfalls that fire service agencies have run into before and will run into again. Training with communications needs to be a department priority because all fire department operations revolve around communications. From the first moment the call is dispatched till you sign back in quarters, radios will play a vital role in the success of your operations. Be proactive, train and understand the communication system within which you operate. ♦

NFA State Weekend

March 10, 11 and 12, 2000 are the dates for next year's State Weekend at the National Fire Academy. Although applications and registration materials will not be sent until January, you may wish to save these dates in their calendar now. The courses that will be offered at the State Weekend are:

Managing Company Tactical Operations

Incident Command System for EMS

Arson Detection for the 1st Responder

Executive Skills Series: Managing and Leading Change

Executive Skills Series: Managing and Leading a Diverse Workforce

Managing in a Changing Environment Shaping the Future

Emergency Response to Terrorism: Tactical Considerations, Company Officer. ♦

This Old House Filmed at MFA Airs Nov. 4 and 6

On June 10, 1999, *This Old House* came to the Mass. Fire-fighting Academy to film a segment on how firefighters are trained. Steve Thomas, one of the stars of the show, and a cameraman, donned turnout gear and SCBA and entered the burn building during a live fire training. This fall season, *This Old House* is rebuilding the Billerica home of one of the show's general contractors that had a fire last March. The home will be rebuilt with many safety construction techniques including residential sprinklers. In addition, the show will feature fire prevention and has joined with the National Fire Protection Association to promote Fire Prevention Week. The segment filmed here at the MFA will be aired on Boston's WGBH on November 4 at 8 p.m. and again on November 6 at 5:30 p.m. It will air in the western part of the state on

WGBY; call their programming office for times and ask for show #1906. Of course, *This Old House* is a national program and it will be shown on public television stations all across the country. ♦

6th Annual Conference of Juvenile Firesetter Programs

The 6th Annual Conference of Juvenile Firesetter Programs will be held at the Westford Regency Inn and Conference Center on November 10-13, 1999. There will be three pre-conference institutes, 48 breakout sessions and master classes, three panel discussion, and five field trips - one of which is to the Massachusetts Fire-fighting Academy! For information contact Irene Pinsonneault at (508) 636-9149 or ilp@tiac.net. ♦



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